

Company Name: \_\_\_\_\_ Dept: \_\_\_\_\_ Location: \_\_\_\_\_ Date: \_\_\_\_\_

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## WIND AND RESIDENTIAL CONSTRUCTION

Wind forces are the most common source of damage to residential construction, sometimes resulting in total destruction. Wind behavior and velocity are influenced by such factors as geographic location, variations in topography (surface roughness), building size and configuration, openings and building stiffness.

The dynamic behavior of wind near the earth's surface is erratic and unpredictable, many times producing a condition calling gusting. Gusting is the result of sharp or sudden changes in wind velocity, which can totally reverse its motion. Most people have experienced leaning into the wind, only to find that upon a gust reversal they are suddenly thrust forward or to the side. Buildings similarly experience reversals in stress, causing members and connections to rapidly switch between tension and compression. Buildings also move and deform under wind force and respond to gusts that change the wind direction by twisting or racking. This results in recognizable creaking noises and can cause nail pops and tears in interior drywall.

Meeting Conducted By:

Meeting Attended By:

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Print Name

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Signature

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Document Filing Reference

Notes & Suggestions